

Numbers and Operations

Name \_\_\_\_\_

Lesson 4: Absolute Value and Integer Operations

Math for Standards

Date \_\_\_\_\_

*EQ: How are absolute value and integer operations applied?*

Integers are the set of \_\_\_\_\_ { \_\_\_\_\_ }.

Every integer has an \_\_\_\_\_; 2 and  $-2$  are \_\_\_\_\_

since they have \_\_\_\_\_. When added,

\_\_\_\_\_ add up to 0.

Absolute value will be \_\_\_\_\_ since we are looking for the

\_\_\_\_\_ from 0.

The commutative property works for \_\_\_\_\_ and

\_\_\_\_\_. This means I can add or multiply in any

order ( $2 + 3 = 5$  and  $3 + 2 = 5$ ).

When you add or subtract a positive and negative number, your result will have the

\_\_\_\_\_ of the “bigger” number.

When you multiply two numbers with the same sign, the result will be

\_\_\_\_\_. When you multiply two numbers with opposite signs,

the result will be \_\_\_\_\_.

When you divide two numbers with the same sign, the result will be

\_\_\_\_\_. When you divide two numbers with opposite signs, the

result will be \_\_\_\_\_.

Example 1: The distance between an integer and its opposite is 18 units. What integers could they be?

Example 2: Simplify.

a.  $|-4|$

b.  $-|8|$

c.  $-|-13|$

Example 3: State whether the following inequalities are correct or incorrect.

a.  $|-10| < |0|$

b.  $|4| > |-2|$

c.  $|-7| > |-3|$

Example 4: Matt Mitarowski deposits \$16 into his bank account. He then writes a check for \$63. What integer would describe the combination of these two transactions?

Example 5: A restaurant has a decrease of 45 diners per month for a whole year. Write an expression using integers to describe the total decrease in diners for the year, then find the total number.